

elf3

Earth Leakage Module

Application:

Leader's in Innovative Protection Systems, Bramco's elf3 detects earth fault currents flowing in a power system and provides visual indication of earth leakage conditions. The elf3 is specifically designed to protect systems supplying VF drives and provides very high immunity to converter noise.

Compliant to latest Australian standards, the elf3 is the next generation in earth leakage protection, offering improved features over ELF2.

Features:

- 32-bit microprocessor core.
- 50-60Hz (VSD Mode Off)
- 5-100Hz (VSD Mode On)
- Backlit Graphic LCD display.
- Settings adjustable through menu.
- Optional password protection for settings.
- CT/Toroid open fault indication.
- Failsafe / non failsafe and latch/non-latch operation, configured via the menu.
- Red LCD backlight to clearly indicate a trip condition, yellow backlight for warning and green for healthy.
- Protection settings and status clearly visible at all times.
- Diagnostics screen to view all current conditions and settings.
- Wide voltage supply range.
- Local reset functionality configurable through the menu.
- Provision for a remote reset button.
- Clear opening door protection to IP66.
- Instrumentation output - 4-20mA Current loop or 2-10V voltage output.
- Use with range of Bramco Earth Leakage Toroids.
- Last fault duration reading.
- Logging of previous trip details.
- Current settings, measurement information and status available via RS485 MODBUS ASCII/RTU.
- Communications settings such as baud rate configurable via menu.
- Backward compatible with ELF2 when installed with new 1000T EL Toroid.

Specifications:

Supply

- 110-240VAC 50/60Hz
- 24 - 48VDC/AC 50/60Hz
- 3VA

Voltage Tolerance: 10%.

Relay Contacts: DPCO 5A 240VAC (General)
5A 30VDC (Resistive)
(100VA Max).

Operating Temp: 0-60Deg C.

Model Variants:

• 30-500mA	50-500ms
• 0.5A-5A	50ms-20s
• 2A-20A	50ms-20s

Monitoring Outputs:

- 4-20mA output into 500 ohm or 2-10V output with internal resistors.
- RS485 MODBUS RTU/ASCII.

Material:

Glass filled Noryl L94V1.

Fascia Mounting:

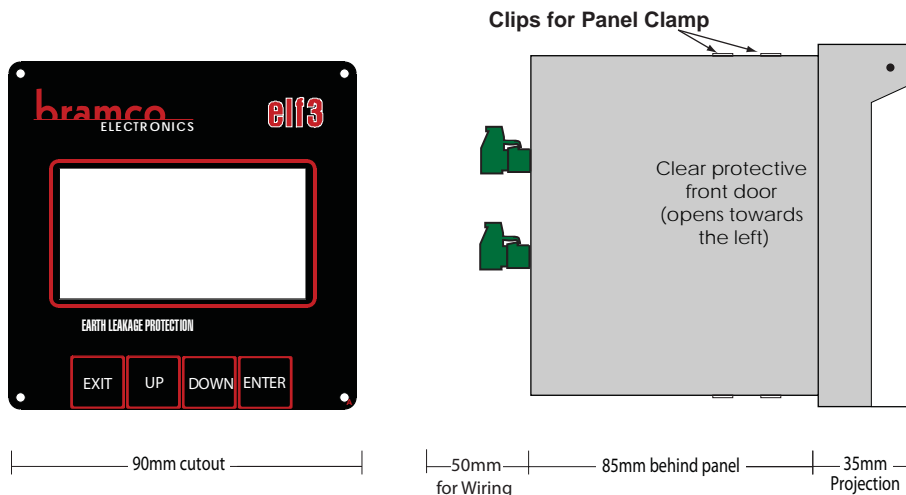
- Fascia Mount din dimensions 96 x 96mm with clear opening door bezel IP66 rated.
- Panel opening 90 x 90mm.
- Pheonix plugs provided.

Weight: 500g.



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Enclosure Dimensions:



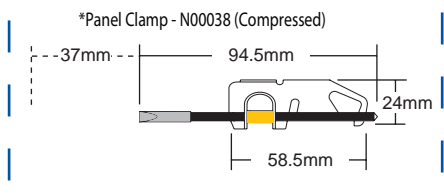
*Supplied with 1 x Sealing Gasket and 2 x Panel Clamps

Bramco Contacts:

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Compliance:

AS2081.3 - 2002:

- Electrical Equipment for Coal and Shale Mines
- Electrical Protection Devices.

The elf3 comes with a 2 year warranty.

Ordering Information:

A01324	elf3 Compliant	30-500mA	50-500ms
A01325	elf3 Low Range	0.5A-5A	50ms-20s
A01326	elf3 High Range	2A-20A	50ms-20s

Toroid Ordering Information:

A01334	Toroid (1000T)	40mm
A01335	Toroid (1000T)	72mm
A01336	Toroid (1000T)	130mm
A01337	Toroid (1000T)	200mm
A01338	Toroid (1000T)	300mm

Typical displays coloured to match operating status:

Green = Healthy

Red = Fault

Yellow = Warning

